

BURIED DIGIT LINE STACK AND PROCESS FOR MAKING SAME

ABSTRACT

5 A process of making a buried digit line stack is disclosed. The process includes forming
a silicon-lean metal silicide first film over a polysilicon plug, followed by a silicide compound
barrier second film. The silicide compound barrier second film is covered with a refractory metal
third film. A salicidation process causes the first film to salicide with the polysilicon plug. In
one embodiment, all the aforementioned deposition processes are carried out by physical vapor
10 deposition ("PVD").